INDEX TO VOLUME 3

Authors

A

Alspach, John 40
Atwood, James D. 95

B

Banks, W. W. 215
Bendixen, Lisa M. 179
Berty, Jozef M. 163
Berzins, Valdis 108
Bhalla, S. K. 98
Bierlein, Lawrence W. 112
Boyer, Charles B. 3, 124, 195
Burger, Robert 184

C

Camp, Allen L. 239
Cerven, F. 215
Clark, Robert W. 141
Colonna, G. R. 188
Connaughton, George E. 141
Cummings, John C. 239

D

De Faveri, D. M. 159
De Paola, T. J. 203
De Roo, J. L. 254
Di Maio, L. R. 42
Doelp, L. C. 227
Dore, J. C. 98

E

Easterbrook, J. 29, 127
Evans, Trevor J. 63

F

Facer, James R. 12
Fakatselis, T. E. 136
Fauske, Hans K. 7, 124, 145, 213
Feeley, F. G., Jr. 31
Fenlon, W. J. 197
Ferraiolo, G. 159
Freeman, Harry M. 113
Fumarola, G. 159

G

Gagliardi, D. V. 29, 127
Gibson, Thomas O. 18, 125
Greiner, Maurice L. 66

H

Hale, C. Clay 147
Hamilton, Thomas B. 86
Hancock, Bernard M. 63
Hirano, Toshisuke 247
Howard, Walter B. 129
Huff, James E. 50
Humes, William H. 222

J

Jercinovic, L. M. 34

K

Kirby, D. C. 254
Kletz, Trevor A. 1, 19, 122, 126, 133, ...194, 210
Kolff, S. W. 117

L

Lasseigne, Anthony H. 94
Lange, R. F. 42
Lawrence, Garth M. 60
Lee, G. K. 227
Lee, John H. S. 239
Linney, R. E. 227

M

Madhavan, S. 14
Magnabosco, Louis M. 222
Martel, J. Troy 80
Marx, Kenneth D. 239
Mehne, Paul H. 37, 128
Mertens, P. R. 117
Messina, C. A. 203
Mullier, Alain 46

N

Nutcher, Peter B. 168

O

O'Neill, J. Kevin 179
Ormsby, R. M. 227

P

Palazzi, E. 159
Parker, R. V. 119
Patel, N. M. 101
Pennington, Rodney J. 72
Pfeffer, H. A. 98
Pierson, Kenneth L. 71
Plett, E. G. 190
Prijatel, John 25

R

Rankin, John P. 175
Rich, Richard W. 12
Rohlfing, R. L. 173
Rustin, A. 46

S

Shields, Valerian 108
Street, Brian F. 63
Swift, Ian 89

U

Udengaard, Niels R. 108

V

Van Hecke, F. 46

W

Wagner, Mark C. 222
Walsh, J. J. 74
Wang, S. T. 101

INDEX TO VOLUME 3

Authors

A

Alspach, John 40
Atwood, James D. 95

B

Banks, W. W. 215
Bendixen, Lisa M. 179
Berty, Jozef M. 163
Berzins, Valdis 108
Bhalla, S. K. 98
Bierlein, Lawrence W. 112
Boyer, Charles B. 3, 124, 195
Burger, Robert 184

C

Camp, Allen L. 239
Cerven, F. 215
Clark, Robert W. 141
Colonna, G. R. 188
Connaughton, George E. 141
Cummings, John C. 239

D

De Faveri, D. M. 159
De Paola, T. J. 203
De Roo, J. L. 254
Di Maio, L. R. 42
Doelp, L. C. 227
Dore, J. C. 98

E

Easterbrook, J. 29, 127
Evans, Trevor J. 63

F

Facer, James R. 12
Fakatselis, T. E. 136
Fauske, Hans K. 7, 124, 145, 213
Feeley, F. G., Jr. 31
Fenlon, W. J. 197
Ferraiolo, G. 159
Freeman, Harry M. 113
Fumarola, G. 159

G

Gagliardi, D. V. 29, 127
Gibson, Thomas O. 18, 125
Greiner, Maurice L. 66

H

Hale, C. Clay 147
Hamilton, Thomas B. 86
Hancock, Bernard M. 63
Hirano, Toshisuke 247
Howard, Walter B. 129
Huff, James E. 50
Humes, William H. 222

J

Jercinovic, L. M. 34

K

Kirby, D. C. 254
Kletz, Trevor A. 1, 19, 122, 126, 133, ...194, 210
Kolff, S. W. 117

L

Lasseigne, Anthony H. 94
Lange, R. F. 42
Lawrence, Garth M. 60
Lee, G. K. 227
Lee, John H. S. 239
Linney, R. E. 227

M

Madhavan, S. 14
Magnabosco, Louis M. 222
Martel, J. Troy 80
Marx, Kenneth D. 239
Mehne, Paul H. 37, 128
Mertens, P. R. 117
Messina, C. A. 203
Mullier, Alain 46

N

Nutcher, Peter B. 168

O

O'Neill, J. Kevin 179
Ormsby, R. M. 227

P

Palazzi, E. 159
Parker, R. V. 119
Patel, N. M. 101
Pennington, Rodney J. 72
Pfeffer, H. A. 98
Pierson, Kenneth L. 71
Plett, E. G. 190
Prijatel, John 25

R

Rankin, John P. 175
Rich, Richard W. 12
Rohlfing, R. L. 173
Rustin, A. 46

S

Shields, Valerian 108
Street, Brian F. 63
Swift, Ian 89

U

Udengaard, Niels R. 108

V

Van Hecke, F. 46

W

Wagner, Mark C. 222
Walsh, J. J. 74
Wang, S. T. 101

Titles

A

Accident Investigation: How Far Should We Go? ... 1; (Discussion) ... 122; (Errata) 194

Ammonia Plant Design for Minimum Manpower Requirements 173

Ammonia Process Simulator 14

Analysis of Combustion in Closed or Vented Rooms and Vessels ... 239

B

Burning Wastes in Steam Boilers .. 31

C

Chemical Plant Risk Assessment Using HAZOP and Fault Tree Methods 179

Coast Guard Confined Spaces Safety Procedures 188

Comparison of ARC and Other Thermal Stability Test Methods, A . 197

Cooling Towers, the Overlooked Money Maker 184

Creative Ways of Revamping NH_3 Plants Can Improve Profitability 101

D

Direct-Contact, Air-Cooled Evaporation 136

Drying of Temperature-Sensitive Solids 74

E

Effect of Water Quality on Fire Fighting Foams 42

Efficient Time Use to Achieve Safety of Processes 129

Emergency Response Procedures for Anhydrous Ammonia Vapor Release 66

Emergency Venting Requirements for Gassy Reactions from Closed-System Tests 50

Energy Pressures on Ammonia 95

F

Failure Analysis of Ammonia Plant Shutdown Instrumentation and Control 25

Failure of a 1500 psig Steam Line . 141

Fire in a Compressor House 46

Flammability Limits With Short Duration Gas Releases 159

Flammability of Gaseous Mixtures of Ethylene Oxide, Nitrogen, and Air 190

Flixborough Explosion—Ten Years Later, The 133

Forced Draft, Low NO_x Burners Applied to Process Fired Heaters 168

Fully Automated Catalytic Cracking Test Unit 222

G

Gas Explosion Processes in Enclosures 247

Generalized Vent Sizing Monogram for Runaway Chemical Reactions 213

Grey Hairs Cost Nothing 210

H

Heat Recovery from Thermal Oxidizers 72

High Pressure Codes and Standards ... 3; (Discussion) ... 124; (Errata) 195

How Safe is Safe Enough? 71

I

Impact of Effective Quality Control, The 117

L

Laboratory Pressure Safety Program, A 34

Learning Value From Recent Loss ... 18; (Discussion) 125

N

Nitrogen Blanketing 203

NTSB Hazardous Material Spill Map Program—An Update, The ... 94

P

Pilot Design—How to Avoid an Expensive Mistake 98

Predictor Displays: The Application of Human Engineering in Process Control Systems 215

Prevention of Major Leaks—Better Inspection After Construction?, The ... 19; (Discussion) 126

Q

Quantitative Fault Tree Analysis: Gate-by-Gate Method 227

Quick Approach to Reactor Vent Sizing, A 145

R

Reducing Risks in Exploratory Chemical Research at High Pressures and Temperatures ... 37; (Discussion) 128

Regulatory Considerations in Hazardous Materials Transportation 112

Revamping Hydrogen Plants for Improved Yield and Energy Efficiency 108

Role of Incineration in Remedial Actions, The 113

Role of the Institution of Chemical Engineers in International Safety, The 63

S

Safe Handling of Phosgene in Chemical Processing 40

Safety and Reliability of Microprocessor Based Combustion Safeguard Systems 80

Safety in Combustion of Unconventional Fuels 86

Safety Systems for a Continuous Petrochemical Process Under Vacuum 119

Scale-up for Safety Relief of Runaway Reactions 7, 124

Sewers Can Pass On Problems ... 29; (Discussion) 127

Shell Rupture of a Secondary Reformer 60

Shutdown Winterization of a 1500 Ton Per Day Ammonia Plant 12

Sneak Circuits—A Class of Random Unrepeatable Glitch 175

Survey of Refrigerated Ammonia Storage in the United Stated and Canada, 1983 147

T

Twenty Years of Recycle Reactors in Reaction Engineering 163

V

Venting Deflagrations—Theory and Practice 89

W

Water Spray Protection for a Chemical Processing Unit: One Company's View 254

Subjects

A

Accident Investigation 1
Air 136,190
Ammonia
  anhydrous 66
  blast 60
  energy pressures 95
  plants 12
  plant design 173
  plant shutdown 25
  process simulator 14
  refrigerated storage 147
  revamping 101
  vapor release 66

B

Boilers
  steam 31
Burners 168

C

Catalytic Cracking 222
Chemical Processing 40
Chemical Research 37
Codes and Standards 3
Combustion
  unconventional fuels 86
Cooling Towers 184
Compressor House 46

D

Design
  ammonia plant 173
  pilot 98
Drying 74

E

Emergency
  response 66
  venting 50
Energy 108
Ethylene Oxide 190
Evaporation
  air-cooled 136
Explosions 60, 133, 247

F

Fault Tree
  analysis 227
  methods 179
Fire 31, 42, 46
  flammability limits 159
  flammability of gaseous mixtures . 190
Foams 42

G

Gas
  explosion 247
  releases 159
Gaseous Mixtures 190
Gassy Reactions 50

H

Hazardous Materials
  NTSB spill map program 94
  regulations 112
  transportation 71, 112
Heaters
  process fired 168
Heat Recovery 72

I

Incineration 113
Instrumentation and Control 25

L

Leaks 19
Loss Prevention 18, 19

M

Microprocess Based Burner Management 80

N

Nitrogen 190
  blanketing 203

P

Petrochemical Process 119
Phosgene 40
Pilot Design 98
Plants
  ammonia 101, 173
  chemical 179
  design 98, 173
  hydrogen 108
Predictor Displays 215
Pressure Systems 34
Processes 119, 129, 247
Processing Unit 254
Process Fired Heaters 168

Q

Quality Control 117

R

Reaction Engineering 163
Recycle Reactors 163
Revamping
  ammonia plants 101
  hydrogen plants 108
Risk Assessment 179
Risk Reduction 37
Runaway Reactions 7

S

Safety
  chemical processing 40
  combustion safeguard systems ... 80
  processes 129
  international 63
  learning value 18
  confined spaces procedures 188
  program 34
  regulation program 71
  relief systems 7
  unconventional fuels 86
  systems 119
Secondary Reformer 60
Sewers 29
Shell Rupture 60
Shutdown 12, 25
Sneak Circuits 175
Solids 74
Steam Boilers 31
Steam Line 141

T

Temperature Sensitive Solids 74
Test
  methods 197
  unit 222
Thermal Oxidizers 72
Thermal Stability 197

V

Vacuum 119
Vapors 29
Venting 50, 89
Vented Rooms and Vessels 239
Vent Sizing 145, 213

W

Wastes 31
Water
  quality 42
  spray protection 254